PARENTERAL FORMULATIONS OF PEPTIDES FOR THE TREATMENT OF SYSTEMIC LUPUS ERYTHEMATOSUS

Abstract of the Invention

subject invention provides a pharmaceutical composition comprising: an aqueous carrier; from 0.1 mg/ml to 20 mg/ml of the composition of a pharmaceutically acceptable salt of a) a peptide comprising at least 12 and at most 30 consecutive amino acids having a sequence corresponding to (i) a sequence of amino acids found within a complementarity-determining region (CDR) of a heavy or a light chain of a human monoclonal anti-DNA 16/6 Id antibody, or (ii) a sequence of amino acids found within a complementarity-determining region (CDR) of a heavy or a light chain of a pathogenic anti-DNA monoclonal antibody that induces a systemic lupus erythematosus (SLE)-like disease response in mice, or b) a peptide comprising consecutive amino acids having the sequence shown by any of SEQ ID NOS. 8-17, or c) comprising consecutive amino acids having a sequence of any of a) and b), or at least two of the sequences in (a)(i), (a)(ii) (b)(i) through (b)(x), or d) a peptide comprising consecutive amino acids having a sequence comprising at least two identical sequences included in (a)(i), (a)(ii) and (b)(i) through (b)(x); and a solubility enhancer, wherein both the peptide and the solubility enhancer are dissolved in the aqueous carrier; and wherein the composition has a pH between 4 and 9, and a method of alleviating symptoms of SLE in a human by administering an effective amount of the composition.